



## OXFORD BIOMEDICAL RESEARCH

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### **MSDS: Human Lactoferrin Assay kit Product No. FR 18**

This product, FR 18 –Human Lactoferrin Assay kit, is provided and produced by Oxford Biomedical Research as an in vitro diagnostic test kit for the sole purpose of research use.

#### Manufacturer:

Oxford Biomedical Research  
2165 Avon Industrial Dr.  
Rochester Hills, MI 48309  
(248) 852-8815

#### Hazardous Components:

Component:  
Solution 8

Hazardous Content:  
Name: Sulfuric Acid, 1M  
CAS#: 7664-93-9  
MP: H<sub>2</sub>SO<sub>4</sub>

OPD Tablets

Name: o-Phenylenediamine Dihydrochloride  
CAS #: 95-54-5  
MP: N/A

#### Physical and Chemical Characteristics:

##### **Sulfuric Acid**

Boiling Point: Not determined  
Vapor Pressure: Not determined  
Vapor Density: Not determined  
Solubility in Water: Soluble

Specific Gravity: Not determined  
Melting Point: N/A  
Evaporation Rate: Not determined  
Appearance: Clear liquid

##### **o-Phenylenediamine Dihydrochloride**

Boiling Point: Not determined  
Vapor Pressure: Not determined  
Vapor Density: Not determined  
Solubility in Water: Soluble

Specific Gravity: Not determined  
Melting Point: Not determined  
Evaporation Rate: Not determined  
Appearance: Tablet

#### Fire and Explosion Hazard Data:

##### **Sulfuric Acid**

Flash Point: Not determined  
Special Fire Fighting Measures: None  
Unusual Fire and Explosion Hazards: Not determined

Flammable Limits: Not determined

### **o-Phenylenediamine Dihydrochloride**

Flash Point: Not determined  
Special Fire Fighting Measures: None  
Unusual Fire and Explosion Hazards: Not determined  
Flash Point: Not determined  
Flammable Limits: Not determined

#### Reactivity Data:

##### **Sulfuric Acid**

Stability: Considered stable. Conditions to Avoid: N/A  
Hazardous Polymerization: Will not occur  
Hazardous Decomposition/ Byproducts: Sulfur Oxides  
Incompatibility with materials: Bases, Halides, organic materials

##### **o-Phenylenediamine Dihydrochloride**

Stability: Considered stable. Conditions to Avoid: N/A  
Hazardous Polymerization: Will not occur  
Hazardous Decomposition/ Byproducts: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas.  
Incompatibility with materials: N/A

#### Health Hazard Data:

##### **Sulfuric Acid**

Threshold Limit Value: Not established  
Toxicity Data: Toxic, Possible carcinogen  
Health Hazards: Corrosive, causes burns. Harmful by inhalation, ingestion or skin absorption. Destructive to the eyes, respiratory system and skin. Inhalation may be fatal or cause cancer.  
First Aid: If swallowed seek immediate medical attention. In case of contact with eyes or skin, flush with plenty of water and seek medical attention if inhaled, exposed to fresh air and seek medical attention.

##### **o-Phenylenediamine Dihydrochloride**

Threshold Limit Value: Not established  
Toxicity Data: Toxic, carcinogen  
Health Hazards: Toxic by inhalation, ingestion or skin absorption. Irritating to eyes skin and respiratory system.  
First Aid: If swallowed seek immediate medical attention. In case of contact with eyes or skin, flush with plenty of water and seek medical attention if inhaled, exposed to fresh air and seek medical attention.

#### Handling and Use Precautions:

##### **Sulfuric Acid/ o-Phenylenediamine Dihydrochloride**

-Accidental Release Measures: Wear suitable protective equipment to prevent inhalation, skin and eye contact. Sulfuric Acid: Dilute with large excess of water and pH to neutral. o-Phenylenediamine Dihydrochloride: none.  
-Waste Disposal: Disposal shall be in accordance with local, state or federal guidelines.  
-Handling and Storage: 4°C - 8°C  
-Other: None

Control Measures:

**Sulfuric Acid/ o-Phenylenediamine Dihydrochloride**

- Respiratory Protection: None required where adequate ventilation exists.
- Ventilation: local exhaust.
- Protective Gloves: Proper disposable gloves.
- Eye Protection: Safety glasses or goggles.
- Other protective equipment: Uniform, lab coat or disposable lab wear.
- Work/Hygienic Practices: Follow usual precautionary measures for handling chemicals. Keep away from food and beverages.

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